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| 09/763,868      | 02/28/2001  | Michel Hazard        | T2146-906833        | 3510             |

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EXAMINER

TRAN, TONGOC

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
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2134

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/763,868

Applicant(s)

HAZARD, MICHEL

Examiner

Tongoc Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

1. This office action is in response to applicant's amendment filed on 12/15/2004. Claims 20, 21, 23, 26-30, 32-38 have been amended. Claims 20-38 are pending.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 12/15/2004 has been considered by the Examiner.

### ***Response to Arguments***

3. Applicant's arguments filed on 12/15/2004 have been fully considered but they are not persuasive. Applicant contends that the cited prior art, Holtey, fails to disclose "storage means distinct from the processing means including means for selecting in said storage means information to be processed, and means for extracting selected information from the storage means, said extracting means transmitting said selected information to processing means, and means for verifying a specific integrity condition of a piece of sensitive information in conjunction with means for disabling the processing of the information, said means for disabling being activated when the means for verification have detected that the specific condition is not satisfied". Holtey discloses in the cited portion of the reference, "a secure memory card includes a microprocessor on a single semiconductor chip which interconnects through an internal bus to a number of non-volatile and addressable memory chips... Each memory chip is constructed to include security control unit and a volatile access control memory

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containing a plurality of access control storage element. Under the control of a predetermined set of instructions, the security access control unit performs a predetermined key validation operation by comparing key values against the bit contents of lock bit locations read out a bit at a time during an authentication procedure with a host computer (Abstract) " (Abstract). The storage means (addressable memory chips) illustrated here is distinct from the processing means in the memory chip or the processing means located in the host computer that performs the authentication. The steps of performing verification by comparing key values in the memory location during the authentication procedure with the host computer in order to control security access control encompasses means for selecting in said storage means information to be processed, and means for extracting selected information from the storage means, said extracting means transmitting said selected information to processing means, and means for verifying a specific integrity condition of a piece of sensitive information in conjunction with means for disabling the processing of the information, said means for disabling being activated when the means for verification have detected that the specific condition is not satisfied.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-23, 26-34 and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Holtey (U.S. Patent No. 5,442,704).

In respect to claim 20, Holtey discloses a method for protecting the processing of sensitive information in a security module having a monolithic structure, information processing means (31) and storage means for storing (32,33) information capable of being processed by said processing means, comprising the following steps (see, Abstract):

selecting a piece of sensitive information stored in the storage means;  
determining a specific condition for the integrity of said information; reading the information and transmitting it to the processing means for processing (see col. 3, line 15 - col. 4, line 29);

processing the information and verifying during processing that the specific condition is satisfied; and disabling processing of the information if the specific condition is not satisfied (see col. 4, lines 30-49).

In respect to claim 21, Holtey discloses the method according to claim 20, wherein the information is an operation code read in the storage means (32, 33), the operation code being contained in a table having a content determined during the manufacture of the security module, and the specific condition for the integrity of the information being the value of the information is equal to one of several set values (see col. 3, line 15 - col. 4, line 29).

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In respect to claim 22, Holtey discloses the method according to claim 21, wherein the operation code to be processed is coded in the form of data bits and said bits do not all have the same binary value (see col. 3, lines 59-68).

In respect to claim 23, Holtey discloses the method according to claim 20, wherein the specific step of determining the condition for the integrity of said information comprises checking a calculated or first piece of integrity data using the information read in the storage means (32, 33) during the reading of the information and transmitting the first piece of integrity data to the processing means, and calculating a second piece of integrity data by the processing means from the information received and checking for equality between the first and second pieces of integrity data (see col. 3, lines 15-58).

In respect to claim 26, Holtey discloses the method according to claim 20, wherein the disabling of the processing of the information is performed by a microprogrammed instruction (see col. 4, lines 4-49).

In respect to claim 27, Holtey discloses the method according to claim 26, wherein the microprogrammed instruction performs the following steps:

writing a piece of disable data into a nonvolatile location of the storage means (32, 33); and disabling the processing of the information (see col. 3, lines 15-27 and col. 4, lines 4-49).

In respect to claim 28, Holtey discloses the method according to claim 27 further comprising reading by the processing means (31) a nonvolatile location of the storage

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means (32, 33) upon power up of said module and disabling the module if a value read at this location does not match (see col. 4, lines 30-49 and col. 12, lines 50-60).

In respect to claim 29, the claim limitation is a system claim that is substantially similar to method claim 1. Therefore, claim 29 are rejected based on the similar rationale.

In respect to claim 30, Holtey discloses a security module according to claim 29, wherein the processing means (31) execute instructions corresponding to operation codes extracted from a table, characterized in that the table comprises a forbidden instruction value (see col. 3, lines 15-27).

In respect to claim 31, the claim limitation is a system claim that is substantially similar to method claim 23. Therefore, claim 31 is rejected based on the similar rationale.

In respect to claim 32, Holtey discloses the security module according to claim 29, wherein the processing means (31) execute instructions corresponding to operation codes extracted from a table, the security module comprising a means for reading an operation code and a disabling means activated during the reading of a forbidden 5 operation code (see col. 3, lines 28-58).

In respect to claim 33, Holtey discloses the security module according to claim 32, wherein the disabling means comprise a means for irreversibly writing an indicator into the storage 3 means (32, 33), and a means for reading said indicator during the next power-up of the module (see col. 4, lines 30-49 and col. 2, lines 50-68).

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In respect to claim 34, Holtey discloses the security module according to claim 29, comprising parity generators (7, 8) cooperating with the storage means, parity generators (11) cooperating with the processing means, and a comparator connected to each of the parity generators and capable of inducing an interrupt in the processing means (see col. 2, line 57 - col. 3, line 3).

In respect to claim 37, the claim limitation is a system claim that is substantially similar to method claim 26. Therefore, claim 37 is rejected based on the similar rationale. In respect to claim 38, Holtey discloses the security module according to claim 29, characterized in that the security module is a microcircuit card (see col. 3, lines 15-27).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-25 and 35-36 are rejected under 35 U.S.C. 103(x) as being unpatentable over Holtey (U.S. Patent No. 5,442,704) in view of Hogg et al. (U.S. Patent No. 4,281,216).

In respect to claims 24-25, Holtey discloses the method according to claim 23. Holtey does not disclose but Hogg discloses a piece of integrity data is calculated from



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at least one piece of calculation data whose value varies as a function of time or varies randomly (Hogg, Col. 9, lines 19-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the function of time with a pseudorandom number generator to varies a value taught by Hogg with Holtey's teaching of secure memory card with programmed controlled of security access for the benefit that there is no human knowledge of the generated keys (Hogg, Col. 19-32).

In respect to claims 35-36, the claim limitations are system claims that are substantially similar to method claims 24-25. Therefore, claims 35-36 are rejected based on the similar rationale.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

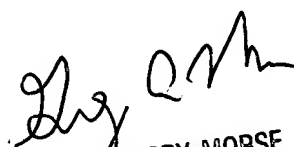
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran  
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TT

  
April 13, 2005

  
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